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No

CODEN: USXXCO

Patent

DT

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ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2005:160051 CAPLUS
DN
     142:249031
TΙ
     Photoresists with high sensitivity and transparency to deep UV lights or
     electron beams, polymers therefor, preparation thereof, and method for
     patterning of them
IN
     Momose, Akira; Otake, Atsushi; Fujiwara, Tadayuki
PΑ
     Mitsubishi Rayon Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 59 pp. .
     CODEN: JKXXAF
DT ·
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                              DATE
                       KIND
                                         APPLICATION NO.
                                                                 DATE
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PΤ
     JP 2005048126
                        A2
                               20050224
                                         JP 2003-283901
                                                                 20030731
PRAI JP 2003-283901
                               20030731
L18
    ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2005:155786 CAPLUS
DN
     142:249027
     High-resolution photoresists, polymers therefor, preparation thereof, and
     method for patterning of them by ArF lasers or electron beams
ΤN
     Momose, Akira; Otake, Atsushi; Ueda, Shoji; Fujiwara, Tadayuki
PΑ
     Mitsubishi Rayon Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 54 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
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PΤ
    JP 2005048128
                       . A2
                               20050224
                                          JP 2003-283986
                                                                20030731
PRAI JP 2003-283986
                               20030731
T.18
    ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2005:72831 CAPLUS
DN
     142:144080
    Acrylic polymers and radiation-sensitive compositions containing them with
TI
     excellent solubility to resist solvents
IN
     Fujiwara, Koichi; Nishimura, Isao
PA
    JSR Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 26 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LΑ
    Japanese
FAN.CNT 1
    PATENT NO.
                        KIND
                                          APPLICATION NO.
                              DATE
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    JP 2005023234
                        A2
                               20050127
                                          JP 2003-191566
                                                                20030704
PRAI JP 2003-191566
                              20030704
    ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
AN
    2004:203441 CAPLUS
DN
    140:261400
ΤI
    Radiation-sensitive resin composition
IN
    Shima, Motoyuki; Ishii, Hiroyuki; Yamamoto, Masafumi; Matsuda, Daichi;
    Nakamura, Atsushi
PΑ
    Japan
    U.S. Pat. Appl. Publ., 27 pp.
SO
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LΑ English FAN. CNT 1 PATENT NO. KIND DATE APPLICATION NO. -----_____ _____ US 2004048192 A1 20040311 US 2003-648243 20030827 JP 2004334156 A2 20041125 JP 2003-298079 20030822 PRAI JP 2002-251812 Α 20020829 JP 2003-112902 Α 20030417 OS MARPAT 140:261400 L18 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN AN 2002:84088 CAPLUS DN 136:119239 ΤI New copolymers for deep UV workable photoresists with good light transmittance and high sensitivity and resolution and method for forming resist patterns with high aspect ratio using the copolymers Nakamura, Takeshi; Ikegawa, Taeko; Sawano, Atsushi; Doi, Kosuke; Ohara, ΤN Hidekatsu Tokyo Ohka Kogyo Co., Ltd., Japan PA Jpn. Kokai Tokkyo Koho, 14 pp. SO CODEN: JKXXAF DT Patent LΑ Japanese FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE - - - **-**---------------PΙ JP 2002030116 A2 20020131 JP 2000-214450 20000714 TW 556046 В 20031001 TW 2001-90116169 20010702 US <u>200203</u>1719 A1 20020314 US 2001-901646 20010711 US 6517993 B2 20030211 DE 10134162 Α1 20020425 DE 2001-10134162 20010713 PRAI JP 2000-214450 Α 20000714 L18 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN AN 2000:624801 CAPLUS DN 133:215460 TΙ Positive-working far UV-sensitive resist composition IN Kodama, Kunihiko; Sato, Kenichiro; Aogo, Toshiaki PA Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 36 pp. SO CODEN: JKXXAF DT Patent T.A Japanese FAN.CNT 1 PATENT NO. APPLICATION NO KIND DATE DATE ---------JP 2000241977 A2 20000908 19990223

=> d l19 1-6 bib

PRAI JP 1999-44978

L19 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:322990 CAPLUS

DN 142:363804

TI Lactone-containing polymers, resist materials containing them with low line edge roughness and excellent resolution, etching resistance, and thermal stability, and pattern formation using them

19990223

IN Funatsu, Akiyuki; Nishi, Tsunehiro; Nagura, Shigehiro

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 58 pp. CODEN: JKXXAF

DT Patent

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FAN.CNT 1
             PATENT NO.
                                     KIND
                                              DATE
                                                            APPLICATION NO.
                                                                                        DATE
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             JP 2005097533
                                              20050414
                                                            JP 2004-144569
       ΡI
                                      A2
                                                                                        20040514
NO
                                                            US 2004-933013
             US 2005089796
                                      Α1
                                              20050428
                                                                                        20040901
       PRAI JP 2003-311056
                                      Α
                                              20030903
             JP 2004-144569
                                              20040514
                                      Α
       L19
             ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
       AN
             2005:120984 CAPLUS
       DN
             142:177333
       TI
             Acrylic polymers and radiation-sensitive resin compositions
       IN
             Fujiwara, Kouichi; Yamaguchi, Hiroshi; Nakamura, Atsushi
             JSR Corporation, Japan
       PA
       SO
             PCT Int. Appl., 38 pp.
             CODEN: PIXXD2
       DT
             Patent
       LΑ
             Japanese
       FAN.CNT 1
             PATENT NO.
                                    KIND
                                              DATE
                                                          APPLICATION NO.
                                                                                       DATE
                                     _ _ _ _
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                                                         WO 2004-JP11143
       PΙ
             WO 2005012374
                                     A1
                                              20050210
                                                                                        20040804
                  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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                       CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, PF, PG, FI, FP, GB, GP, HU, IE, IT, LU, MC, NI, PI, PT, RO, SE,
                       EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
                       SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                       SN, TD, TG
             JP 2005068418
                                      A2
                                              20050317
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                                                                                        20040804
       PRAI JP 2003-286389
                                      Α
                                              20030805
       RE.CNT 7
                        THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
                        ALL CITATIONS AVAILABLE IN THE RE FORMAT
       L19
             ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
       ΑN
             2005:120082 CAPLUS
       DN
             142:228720
       ΤI
             Norbornane type fluoro compound suitable as additive to chemically
             amplified type photoresist composition
       IN
             Chiba, Takashi; Hayashi, Akihiro; Shimokawa, Tsutomu
             JSR Ltd., Japan
       PA
             Jpn. Kokai Tokkyo Koho, 19 pp.
       SO
             CODEN: JKXXAF
       DT
             Patent
       LΑ
             Japanese
       FAN.CNT 1
             PATENT NO.
                                    KIND
                                             DATE
                                                           APPLICATION NO.
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       PΙ
             JP 2005035941
                                      A2
                                             20050210
                                                           JP 2003-275425
                                                                                        20030716
       PRAI JP 2003-275425
                                             20030716
       OS
             MARPAT 142:228720
      L19
             ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
      AN
             2004:901010 CAPLUS
      DN
             141:386367
       ΤI
             (Meth)acrylic polymers for radiation sensitive resin compositions with
             good transparency and resist properties and reduced line edge roughness
       IN
             Fujiwara, Koichi; Okamoto, Kenji; Kobayashi, Eiichi
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ĿA

Japanese

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JSR Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 32 pp.
     CODEN: JKXXAF
DT
    Patent
    Japanese
A.T
FAN.CNT 1
    PATENT NO.
                     KIND
                                       APPLICATION NO.
                             DATE
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    JP 2004300403
                       A2
                                       JP 2003-290461
                             20041028
PΙ
                                                             20030808
PRAI JP 2003-73457
                       Α
                             20030318
L19 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
    2003:855512 CAPLUS
AN
DN
    139:343483
ΤI
    Radiation-sensitive resin composition
    Nishimura, Yukio; Ishii, Hiroyuki; Yamamoto, Masafumi; Nishimura, Isao
ΤN
PΑ
SO
    U.S. Pat. Appl. Publ., 26 pp.
    CODEN: USXXCO
DT
    Patent
                                      used In REj
LA English
FAN.CNT 1
    PATENT NO.
                    KIND
                             DATE
                                  APPLICATION NO.
                                                             DATE
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                                       (US 2003-386707)
    US 2003203309
                       A1
                             20031030
                                                             20030313
    JP 2003337419
                       A2
                                        JP 2003-66164
                             20031128
                                                             20030312
PRAI JP 2002-71696 A
                             20020315
    ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
L19
AN
    2003:751284 CAPLUS
DN
    139:252530
TI
    Chemically amplified radiation-sensitive photoresist composition
IN
    Okamoto, Kenji; Kurokawa, Mitsuo
PΑ
    JSR Ltd., Japan
SO
    Jpn. Kokai Tokkyo Koho, 16 pp.
    CODEN: JKXXAF
DT
    Patent
LΑ
    Japanese
FAN.CNT 1
                                       APPLICATION NO.
                     KIND DATE
                                                            DATE
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                      A2 20030925 JP 2002-73000
20020315
    JP 2003270788
                                                            20020315
PRAI JP 2002-73000
                             20020315
=> d 120 1-3 bib
L20 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN
    2004:430044 CAPLUS
DN
    140:414953
ΤI
    Chemically amplified positive-working far-UV photoresist compositions
IN
    Sato, Kenichiro; Kodama, Kunihiko
PA
    Fuji Photo Film Co., Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 75 pp.
    CODEN: JKXXAF
DT
    Patent
LΑ
    Japanese
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                       APPLICATION NO. DATE
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PI JP 2004151355
PRAI JP 2002-316284
                      A2 20040527
                                        JP 2002-316284
                                                             20021030
                             20021030
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MARPAT 140:414953

L20 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN AN 2004:203441 CAPLUS

DN 140:261400

TI Radiation-sensitive resin composition

IN Shima, Motoyuki; Ishii, Hiroyuki; Yamamoto, Masafumi; Matsuda, Daichi; Nakamura, Atsushi

PA Japan

SO U.S. Pat. Appl. Publ., 27 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	L. LATA	CIVI I				•
		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	ΡI	US 2004048192	A1	20040311	US 2003-648243	20030827
		JP 2004334156	A2	20041125	JP 2003-298079	20030822
	PRAI	JP 2002-251812	Α	20020829	·	
		JP 2003-112902	Α	20030417		
	os	MARPAT 140:261400				

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lzo-Answer3

L21 ANSWER 1 OF 1 USPATFULL on STN

AN 2004:63674 USPATFULL

TI Radiation-sensitive resin composition

Shima, Motoyuki, Tokyo, JAPAN Ishii, Hiroyuki, Tokyo, JAPAN Yamamoto, Masafumi, Tokyo, JAPAN Matsuda, Daichi, Tokyo, JAPAN Nakamura, Atsushi, Tokyo, JAPAN

PI US 2004048192 A1 20040311

AI US 2003 48243 A1 20030827 (10) PRAI JP 2002 251812 20020829

PRAI JP 2002 251812 20020829 JP 2003-112902 20030417

DT Utility

FS APPLICATION

LREP Supervisor, Patent Prosecution Services, PIPER RUDNICK LLP, 1200

Nineteenth Street, N.W., Washington, DC, 20036-2412

CLMN Number of Claims: 6 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2427

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A radiation-sensitive resin composition comprising (A) a resin comprising at least two recurring units of the formulas (1)-(6) in the total amount of 5-70 mol %, but each in the amount of 1-49 mol %, the resin being insoluble or scarcely soluble in alkali, but becoming easily soluble in alkali by the action of an acid, and (B) a photoacid generator. ##STR1## ##STR2##

wherein R.sup.1 is a hydrogen or methyl and R.sup.2 is a substituted or unsubstituted alkyl group having 1-4 carbon atoms. The resin composition is useful as a chemically amplified resist having high transmittance of radiation, sensitivity, resolution, dry etching resistance, and pattern profile.

IT 670248-62-1P 670248-63-2P

(radiation-sensitive resin composition containing)

RN 670248-62-1 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-1-methylethyl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 342014-18-0 CMF C14 H22 O2

CM 2

CRN 254900-07-7 CMF C12 H14 O4

CRN 177080-67-0 CMF C15 H22 O2

RN 670248-63-2 USPATFULL

CN 2-Pro

2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl ester, polymer with 1-bicyclo[2.2.1]hept-2-yl-1-methylethyl 2-propenoate and 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 353275-40-8 CMF C13 H20 O2

CM 2

CRN 303186-14-3 CMF C15 H22 O2

CRN 254900-07-7 CMF C12 H14 O4

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L8		60 S L4 FULL
L9		7 S L5 AND L6
L10		11 S L5 AND L7
L11		3 S L5 AND L8
L12		STRUCTURE UPLOADED
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L16		2 S L11
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L21		1 S L11

ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:84088 CAPLUS

DN 136:119239

TI New copolymers for deep UV workable photoresists with good light transmittance and high sensitivity and resolution and method for forming resist patterns with high aspect ratio using the copolymers

IN Nakamura, Takeshi; Ikegawa, Taeko; Sawano, Atsushi; Doi, Kosuke; Ohara, Hidekatsu

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2002030116	A2	20020131	JP 2000-214450	20000714
	TW 556046	В	20031001	TW 2001-90116169	20010702
	US 2002031719	A1	20020314	US 2001-901646	20010711
	US 6517993	B2	20030211		
	DE 10134162	A1	20020425	DE 2001-10134162	20010713
PRAI	JP 2000-214450	Α	20000714		

AB The copolymers bear units derived from (meth)acrylic acid 1-(C1-4 alkyl)cyclohexyl esters, unsatd. acid anhydrides, and optionally allyltrimethylsilane or/and 2-(C1-4 alkyl)-2-adamantyl (meth)acrylate, and are used in a photoresist composition containing photochem. acid formers and organic

solvents. Thus, mixing 1-ethyl-1-cyclohexyl methacrylate 7.4 with 2-methyl-2-adamantyl methacrylate 5.3, maleic anhydride 0.9, allyltrimethylsilane 7.3 and AIBN 0.6 in EtOAc 69.4 parts at room temperature for 60 min, heating at 70° for 22 h and working up gave a copolymer with Mw 18,400 and polydispersity 1.54, which was dissolved in propylene glycol monomethyl ether acetate to 7% concentration, mixed at 30 g with 4-(MeO)C6H4(Ph)2S+C4F9SO3- 0.258 g, and filtered to give a photoresist with photo-sensitivity 60 J/cm2, resolution 0.17 μm and focusing deep width 0.5 μm .

IT 391208-99-4P, Allyltrimethylsilane;1-ethyl-1-cyclohexyl
methacrylate;maleic anhydride;2-methyl-2-adamantyl methacrylate copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)

(new copolymers for deep UV workable photoresists with good light transmittance and high sensitivity and resolution and method for forming resist patterns with high aspect ratio using copolymers)

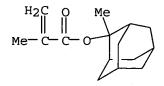
RN 391208-99-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with 1-ethylcyclohexyl 2-methyl-2-propenoate, 2,5-furandione and trimethyl-2-propenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 274248-09-8 CMF C12 H20 O2

CRN 177080-67-0 CMF C15 H22 O2



CM 3

CRN 762-72-1 CMF C6 H14 Si

 $Me_3Si-CH_2-CH=CH_2$

CM 4

CRN 108-31-6 CMF C4 H2 O3

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L41 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 2003:675602 CAPLUS

DN 139:188325

TI Positive resist composition

IN Sato, Kenichiro

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 76 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

		_																
	PAC	rent	NO.			KIND DATE			APPLICATION NO.						DATE			
ΡI	PI EP 1338922				A2 20030827			EP 2003-3244						20030221				
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY, P	L,	TR,	BG,	CZ,	EE,	HU,	SK	
	JP	2003	2413	79		A2		2003	0827	JE	2	002-	4466	5		20	0020	221
	US	2003	1946	40		A1		2003	1016	US	2	003-	3696	38		20	0030	221
·	US	6824	956			B2		2004	1130									
PRAI	JP	2002	-446	65		Α		2002	0221									

AB A pos. resist composition comprises: (A) a resin which comprises a repeating unit represented by I (R1 = H, alkyl group; A1 = single bond or a linking group; R2 = alkylene group; X = alkoxy group, hydroxyl group), which exhibits an increased rate of dissoln. in an alkali developing solution by an action of an acid; and (B) a compound capable of generating an acid on exposure to active light rays or a radiation.

IT 581799-32-8P

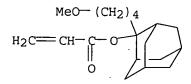
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos. resist composition containing)

RN 581799-32-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with 2-(4-methoxybutyl)tricyclo[3.3.1.13,7]dec-2-yl 2-propenoate, octahydro-1,2(or 2,3)-dihydroxy-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 581784-05-6 CMF C18 H28 O3



CM 2

CRN 309260-42-2 CMF C14 H20 O4 CCI IDS

$$\begin{array}{c|c} H_2C & O \\ \parallel & \parallel \\ Me^- & C^- & C^- & O \end{array}$$
 OH

D1-OH

CM 3

CRN 195000-66-9 CMF C8 H10 O4

CM 4

CRN 177080-67-0 CMF C15 H22 O2

L41 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:454620 CAPLUS

DN 139:28640

TI Positive-working chemically amplified photoresist composition and method of forming resist pattern from the same

IN Iwai, Takeshi; Kubota, Naotaka; Fujimura, Satoshi; Miyairi, Miwa; Hada, Hideo

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN. CNT 1

	PATENT 1	NO.			KIN	D	DATE		i	APPL	I CAT	ION	. O <i>l</i> .		Dž	ATE	
ΡI	WO 2003	 0488	 61		 A1	-	2003	. 0612	ī	70 2	 002-i	 JP12:	 524		20	0021	 129
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	MY	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH
Į.	MX/	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT
NOT	KV /	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,	ΡL,	PT
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UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     JP 2003241385
                          A2
                                 20030827
                                            JP 2002-201310
                                                                     20020710
     EP 1452917
                          A 1
                                 20040901
                                             EP 2002-788695
                                                                     20021129
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                 20040121
     TW 573230
                          В
                                             TW 2002-91134954
                                                                     20021202
     US 2004110085
                          A1
                                 20040610
                                             US 2003-467130
                                                                     20030801
     US 2005095535
                          Α1
                                 20050505
                                             US 2004-4798
                                                                     20041207
     JP 2005128572
                          Α2
                                 20050519
                                             JP 2005-1369
                                                                     20050106
     JP 2005128573
                          A2
                                 20050519
                                             JP 2005-1370
                                                                     20050106
                                 20011203
PRAI JP 2001-369341
                          Α
     JP 2001-382126
                          Α
                                 20011214
     JP 2002-201310
                          Α
                                 20020710
     WO 2002-JP12524
                          W
                                 2002/1129
     US 2003-467130
                          A1
                                 20030801
AB
     The invention relates to a pos. Resist composition comprising (A) a resin
     ingredient which has ester side chains/having an acid-dissociating
     dissoln.-inhibitive group containing a polycyclic group and has structural
     units derived from a (meth)acrylic exter in the main chain and which comes
     to have enhanced alkali solubility by the action of an acid, (B) an acid
     generator ingredient which generate's an acid upon exposure to light, and
     (C) an organic solvent, the composition being of the chemical amplification
type
     wherein the ingredient (A) has both structaral units derived from a
     (meth)acrylic ester and structural units derived from an acrylic ester.
     This resist composition gives/a resist pattern which is reduced in surface
     roughness and line edge roughness during etching and has excellent resolution
     and a wide focal-depth range'.
ΙT
     537705-97-8
     RL: NUU (Other use, unclașsified); USES (Uses)
        (resin; pos.-working chemical amplified photoresist composition)
RN
     537705-97-8 CAPLUS
CN
     2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-
     cyclopenta[b] furan-6-yl ester, polymer with 2-ethyltricyclo[3.3.1.13,7] dec-
     2-yl 2-propenoate, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl
     2-propenoate, 3-hydroxytricyclo[3_3-1.13,7]dec-1-yl 2-methyl-2-propenoate,
     3-hydroxytricyclo[﴿3:1.13-٢] dec-1-yl 2-propenoate, 1-methyl-1-
     tricyclo[3.3.1.13,7]dec-1-ylethyl 2-propenoate, 2-
     methyltricyclo[3(3.1.13,7)]dec-2-yl 2-methyl-2-propenoate and
     tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)
     CM
          1
     CRN
          303186-14-3
     CMF
          C15 H22 Q2
H_2C = CH - C
     CM
          2
```

CRN

CMF

300833-10-7

C16 H24 O2

CRN 254900-07-7 CMF C12 H14 O4

CM 4

CRN 242129-35-7 CMF C11 H12 O4

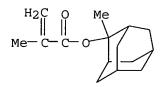
CM 5

CRN 216581-76-9 CMF C13 H18 O3

CRN . 195000-66-9 CMF C8 H10 O4

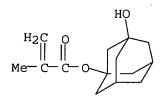
CM 7

CRN 177080-67-0 CMF C15 H22 O2



CM 8

CRN 115372-36-6 CMF C14 H20 O3



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L41 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:214743 CAPLUS

DN 138:238854

TI (Meth)acrylic acid copolymers with narrow molecular weight distribution and their manufacture

IN Matsumoto, Hitoshi; Nakamura, Mitsuhiro

PA Nippon Soda Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

PATENT NO.	. KIND	DATE	APPLICATION NO.	DATE
PI JP 2003082010 PRAI JP 2001-272949	A2	20030319	JP 2001-2/2949	20010910

AB The copolymers suitable for ArF excimer laser photoresist base resins, are manufactured by copolymg. ≥2 (meth)acrylate esters in the presence of anionic polymerization initiators and 0.1-1.0 equiv mol ratio (based on the

initiators) of mineral acid alkali metal and/or alkaline earth metal salts and have repeating units CH2CR1CO2AB (R1 = H, C1-5 alkyl; A = single bond, ether, ester, carbonyl, alkylene, or their combination; B = lactone residue) and Mw/Mn 1.01-1.50. Thus, 2-methyl-2-adamantyl methacrylate was reacted with methacrylic acid-5-oxo-4-oxatricyclo[4.2.1.03,7]nonan-2-yl in the presence of LiCl and sec-butyllithium to give a polymer showing Mw/Mn 1.29.

IT 501422-53-3P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

((meth)acrylate copolymers with narrow mol. weight distribution and their manufacture with anionic polymerization initiators and mineral acid alkali or alkaline

earth metal salts)

RN 501422-53-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b] furan-6-yl ester, polymer with 2-(4-methoxybutyl)tricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CAINDEX NAME)

CM 1

CRN 501422-52-2 CMF C19 H30 O3

MeO-
$$(CH_2)_4$$
Me- C
 CH_2
 O

CM 2

CRN 254900-07-7 CMF C12 H14 O4

CM 3

CRN 177080-67-0 CMF C15 H22 O2

L41 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:42890 CAPLUS

DN 138:115058

TI Resist composition and patterning process

IN Kobayashi, Tomohiro; Nishi, Tsunehiro; Watanabe, Satoshi; Kinsho, Takeshi; Nagura, Shigehiro; Ishihara, Toshinobu

PA Shin-Etsu Chemical Co., Ltd., USA

SO U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2003013039	A1	20030116	US 2002-170345	20020614
	US 6830866	B2	20041214		
	JP 2003066612	A2	20030305	JP 2002-168143	20020610
	TW 548518	В	20030821	TW 2002-91113198	20020614
PRAI	JP 2001-181079	Α	20010615		

AB The present invention relates to a resist composition comprising a hydrogenated product of ring-opening metathesis polymer and a poly(meth)acrylic acid derivative as a base resin. The present invention relates to a resist composition

is sensitive to high-energy radiation, has excellent sensitivity, resolution, and etch resistance, and lends itself to micropatterning with electron beams or deep-UV.

IT 485818-97-1P

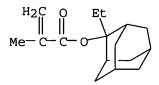
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (photoresist composition and patterning process containing)

RN 485818-97-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with hexahydro-5-oxo-2,6-methanofuro[3,2-b]furan-3-yl 2-methyl-2-propenoate and 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 274248-05-4 CMF C11 H12 O5



CRN 177080-67-0 CMF C15 H22 O2

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN L41

AN 2000:624801 CAPLUS

DN 133:215460

ΤI Positive-working far UV-sensitive resist composition

IN Kodama, Kunihiko; Sato, Kenichiro; Aogo, Toshiaki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DT Patent

LΑ Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000241977 PRAI JP 1999-44978	A2	20000908 19990223	JP 1999-44978	19990223

The pos.-working far UV-sensitive resist composition has a photoacid generator and a resin, which has -O-C(R')(R'')(X-COR) (R', R'' = alkyl, cyclic hydrocarbon; X = single bond, divalent connecting group; R = alkoxy, amide, amino, etc.) group in the side chain, increasing the solubility towards an alkali developer upon reacting with an acid. The composition having the resin is suitable for exposure with ≤250 nm far UV light.

IT 290304-63-1P

> RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin in pos.-working far UV sensitive resist composition)

RN 290304-63-1 CAPLUS

CN Tricyclo[3.3.1.13,7] decane-2-acetic acid, 2-[(2-methyl-1-oxo-2propenyl)oxy]-, polymer with 1,1-dimethylethyl 2-[(2-methyl-1-oxo-2propenyl)oxy]tricyclo[3.3.1.13,7]decane-2-acetate and 2methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 290304-39-1 CMF C16 H22 O4

CM 2

CRN 290304-38-0 CMF C20 H30 O4

CM 3

CRN 177080-67-0 CMF C15 H22 O2

L41 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:144639 CAPLUS

DN 132:173415

TI Chemically amplified positive photoresist composition

IN Fujishima, Hiroaki; Uetani, Yasunori; Araki, Kaoru

PA Sumitomo Chemical Company, Limited, Japan

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. ĊNT 1 PATENT NO.

KIND DATE

APPLICATION NO.

DATE

												-				_		
ΡI	ΕP	9826	28			A2	2	2000	0301	EF	1	999-	1167	05		1	9990	825
	ΕP	9826	28			A3	2	2000	0503									
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, C	SR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO										
	CN	1245	910			Α	2	2000	0301	CN	1	999-	1116	98		1	9990	824
	KR	2000	0174	85		Α	2	2000	0325	KF	1	999-	3515	1		1	9990	824
	JP	2000	1373	27		A2	2	2000	0516	JE	1	999-	2385	42		1	9990	825
	SG	8512	9			A1	2	2001	1219	SC	; 1	999-	4186			1	9990	825
	TW	5204	63			В	2	2003	0211	TW	1 1	999-	8811	4535		1	9990	825
	US	6239	231			B1	2	2001	0529	US	3 1	999-	3840	32		1	9990	826
PRAI	JP	1998	-240	143		Α		1998	0826									
	7 -		7	7			1	4										

AB A chemical amplified pos. photoresist composition, excellent in adhesion to a substrate, good in resist performances, and suitable for exposure using a KrF excimer laser, an ArF excimer laser, or the like, comprises an acid generator and a resin made from a 2-alkyl-2-adamantyl (meth)acrylate and 3-hydroxy-1-adamantyl (meth)acrylate or (meth)acrylonitrile.

IT 258879-99-1P

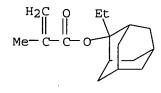
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation and use in preparing chemical amplified pos. photoresists) RN 258879-99-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyltricyclo[3.3.1.13,7]dec-2-yl ester, polymer with 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 209982-56-9 CMF C16 H24 O2



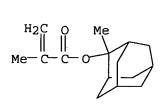
same as Kospayash

CM 2

CRN 195000-66-9 CMF C8 H10 O4

CM 3

CRN 177080-67-0 CMF C15 H22 O2



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L42 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 2003:855512 CAPLUS

DN 139:343483

TI Radiation-sensitive resin composition

IN Nishimura, Yukio; Ishii, Hiroyuki; Yamamoto, Masafumi; Nishimura, Isao

PA Japan

SO U.S. Pat. Appl. Publ., 26 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
			-		
ΡI	US 2003203309	A1	20031030	US 2003-386707	20030313
	JP 2003337419	A2	20031128	JP 2003-66164	20030312
PRAI	JP 2002-71696	A	20020315		

AB A radiation-sensitive resin composition suitable as a chemical amplified resist useful for microfabrication comprises: (A) a resin insol. or scarcely soluble in alkali, but becomes alkali soluble by the action of an acid and (B) a photoacid generator. The resin comprises at least one recurring unit of the following formula I (R1 = H, methyl; A1 = single bond, X1-COO-; X1 = methylene, alkylene with less with 10 carbon atoms; R2 = C1-6 alkyl; n = 0, 1; R3 = H, C1-6 alkyl, oxygen containing group), II (R4 = H, methyl; A2 = single bond, X2-COO-; X2 = methylene, alkylene with less with 10 carbon atoms; R5 = C1-4 alkyl, C4-20 monovalent alicycli hydrocarbon group).

IT 617711-90-7P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(radiation-sensitive resin composition for microfabrication containing)

RN 617711-90-7 CAPLUS

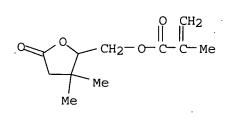
CN 2-Propenoic acid, 2-methyl-, 1-ethylcyclopentyl ester, polymer with hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b] furan-6-yl 2-methyl-2-propenoate, 2-methyltricyclo[3.3.1.13,7]dec-2-yl

2-methyl-2-propenoate and (tetrahydro-3,3-dimethyl-5-oxo-2-furanyl)methyl

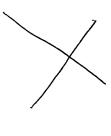
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 379257-69-9 CMF C11 H16 O4







CM 2

CRN 266308-58-1 CMF C11 H18 O2

$$\begin{tabular}{c|c} O & CH_2 \\ || & || \\ O-C-C-Me \\ \\ Et \end{tabular}$$

CRN 254900-07-7 CMF C12 H14 O4

CM 4

CRN 177080-67-0 CMF C15 H22 O2

=>

bib ab hitstr

L43 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:624801 CAPLUS

DN 133:215460

TI Positive-working far UV-sensitive resist composition

IN Kodama, Kunihiko; Sato, Kenichiro; Aogo, Toshiaki

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000241977	A2	20000908	JP 1999-44978	19990223
DDAT	TD 1000 44070		1000000		

PRAI JP 1999-44978 19990223

AB The pos.-working far UV-sensitive resist composition has a photoacid generator and a resin, which has -O-C(R')(R'')(X-COR) (R', R'' = alkyl, cyclic hydrocarbon; X = single bond, divalent connecting group; R = alkoxy, amide, amino, etc.) group in the side chain, increasing the solubility towards an alkali developer upon reacting with an acid. The composition having the resin is suitable for exposure with ≤ 250 nm far UV light.

IT 290304-61-9P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin in pos.-working far UV sensitive resist composition)

RN 290304-61-9 CAPLUS

CN Cyclohexaneacetic acid, 1-[(2-methyl-1-oxo-2-propenyl)oxy]-, polymer with 2-methyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 290304-60-8 CMF C12 H18 O4

CM 2

CRN 177080-67-0 CMF C15 H22 O2

